

Principles of Operational Risk Management

The U.S. Army adopted Risk Management in 1991 to reduce training and combat losses. The armed forces have come to realize that unnecessary losses are detrimental to operational capability. Historically the U.S. armed forces have lost a larger percentage of battle assets to mishaps than to enemy action. The Naval Safety Center reports the following statistics.

Cause	WW II 1942-1945	Korea 1950-1953	Vietnam 1965-1972	DS/DS 1990-1991
MISHAPS	56%	44%	54%	75%
FRIENDLY FIRE	1%	1%	1%	5%
ENEMY ACTION	43%	55%	45%	20%

TERMS USED IN OPERATIONAL RISK MANAGEMENT

Hazard = A condition with the potential to cause illness, injury, death, property damage, or mission degradation.

Cause = Something that produces an effect, result, or consequence.

The person, event, or condition responsible for an action or result. A hazard in one arena may be a cause in another. A cause is more specific than a hazard. A way to know if something is a hazard or a cause is to ask the question: "Is this specific enough to help identify a corrective control?" If the answer is "no" it is a hazard; and if the answer is "yes" it is a cause. There may be several causes associated with one hazard. If the more specific causes are not identified, necessary controls may be omitted,

resulting in the hazard not being eliminated, or its risk inadequately reduced.

Risk = A possible loss expressed in terms of severity and probability. Leaders can make better decisions once a hazard is converted to a risk.

Risk Assessment = The process of detecting hazards and assessing associated risks.

Severity = Expected consequence of an event in terms of degree of injury, illness, property damage, or other mission-impairing factors.

Controls = Actions taken to eliminate hazards or reduce their risk.

Three Types of Controls = Engineering controls.
Administrative controls. Personal Protective Equipment.

Engineering Controls = Controls that use engineering methods to reduce risk by Design, or by Material Selection or Substitution.
May not be feasible in many cases.

Administrative Controls = Provide warnings, markings, placards, signs, and notices. Implement written policies, programs, instructions, and SOPs. Train members to recognize hazards and take proper action. Limit the number of personnel or equipment, or the time exposed to a hazard.

Personal Protective Equipment = a barrier between a person and a hazard. Tends to be least effective type of control because it does not reduce the probability of a mishap occurring. It only reduces

the severity when a mishap does occur. This is used when other controls do not reduce the risk to an acceptable level.

LEADERSHIP. There are two goals of leadership: accomplish the mission, and welfare of the "troops". Leadership failures are often contributing causes of unnecessary mishaps, resulting in one or both of the goals not being accomplished.

TEACH ORM. The principles of ORM can be taught and effectively applied throughout Civil Air Patrol, to improve leadership capabilities of all personnel.

COMMON MISHAP CAUSES.

Individual failure. CAP member knows and is trained to standard, but elect not to follow the standard [self-discipline].

Support failure. Equipment/material improperly designed or not provided.

Leader failure. Leader does not enforce known standard.

Training failure. Member not trained to known standard [insufficient, incorrect, or no training on task].

Standards failure. Standards or procedures are not clear, or are impractical, or do not exist.

APPROACH TO RISK--A COMPARISON [Traditional vs ORM]

Traditional	Operational Risk Management
Random; Dependent on Individual	Systematic
Common Sense	Methodical
Uninformed Decision	Informed Decision
"Can do" regardless of risk	Conscious decision based on risk vs. benefit
Compliance Based	Involvement & Empowerment
Reactive	Proactive

FIVE STEPS IN PERFORMING ORM.

Memory Acronym = **I AM IS**

- 1. Identify Hazards**
- 2. Assess Hazards**
- 3. Make Risk Decisions**
- 4. Implement Controls**
- 5. Supervise**

The CAP leader, in making a decision about an activity, should factor both the **severity** of the **hazards** and the probability of a mishap occurring. ORM is a decision making tool, used by people at all levels, to increase our operational effectiveness by anticipating hazards and reducing the potential for loss, thereby increasing the probability of a successful mission. CAP members at all levels need to know how to manage risks. We have a moral responsibility to protect our members, and the general public. ORM helps us meet that responsibility. ORM is a process of identifying and controlling hazards. The goal of ORM is to manage risk so the mission can be accomplished with minimum loss.

Assessing Hazard Severity.

Critical = May cause death, loss of asset, or grave damage to CAP

Serious = May cause sever injury, illness, property damage

Moderate = May cause minor injury, illness, property damage

Minor = Minimal threat to members, public, CAP

Assessing Mishap Probability.

Mishap Probability can be: Likely, Probable, Reasonably expected that it May occur in the situation, or Unlikely.

Making the decision involves: **1.** Selecting the best trained people, **2.** Using the best maintained equipment, **3.** Instructed in clear terms about the mission and its limits, **4.** To Accomplish the mission with extreme emphasis on safety, **5.** Appropriate Supervision in place at all levels. And yet, if there is a Serious or Critical hazard, and/or it is likely or probable that a mishap will occur, then responsible leadership dictates that the mission must be delayed until the hazard and/or mishap likelihood can be reduced. This may mean waiting for weather to improve, for better equipment to arrive, or for better-trained [or non-fatigued] people to arrive.

Good leadership means applying ORM principles ACTIVELY. Recognizing that we cannot eliminate all risk, we still must NOT ACCEPT UNNECESSARY RISK. The gambler does not know what will happen. The good, risk-MANAGING leader can reasonably predict what the outcome will be. Anticipate and Manage risk. ORM must be integrated early in all CAP training and activities. ORM is not nearly as effective if it is tacked on as an afterthought. Remember, Proper Planning Prevents Poor Performance.

The benefits of actively applying the ORM process include: reduction of mishaps, lower injury and property damage costs, more effective use of resources, improved training realism and effectiveness, and improved morale and retention.